EPA -- PBT Meeting

December 2, 1999

MR. SPRINGER: My name is Bob Springer. [Inaudible. Speaker by overhead projector, not microphone.]

MS. CODINA: My voice doesn't carry like Bob's so I need the, I need the, my voice doesn't carry like Bob's so I need the, the microphone.

We are really honored to have Bob give the opening remarks. He is very interested on PBT and also, from headquarters we have Maria Doa. She is the Division Director for the TRI and we also have the ...

She will be talking about the proposal and we have also Cody Rice, who is doing, I mean who did the, the economic analysis. We also have Tom Boer who is from US EPA So our program will start with, of course, it started with Bob Springer and Maria Doa will follow next.

She was going to do, I mean she is going to talk about the proposal and Cody Rice is going to talk about the economic analysis.

Then it will be opened up for questions and answers, or if you have also any comment to make, it will be open up. Okay. Thank you. Maria?

MS. DOA: [Not optimally audible. Speaker not close to microphone.] Thank you Thelma, my voice does carry so I will...
I'll see if I can turn this on.

I would like to give a brief overview of the proposed rule to lower the reporting thresholds for lead and lead compounds. Thank you, Debbie [phonetic].

Under section 313 which most of you know is what mandates the toxic relief inventory and I'd just like to spend a minute on toxic release inventory—what it does and what it doesn't do and some of the guidance that we have received from Congress on those.

TRI just requires reporting of releases of toxic chemicals to air, water,

land, underground injection both on-site and offsite, and then the Pollution Prevention Activity requires that we additionally collect information on waste management. TRI does not dictate how people use the chemical, how they release the chemical—does not dictate that they have to decrease their releases or other waste management quantities. But the purpose is to provide a picture of the toxic chemical, both the release picture and the waste picture, which includes release and how people are [inaudible] waste management hierarchy.

This information is to be used by the public, researchers, governments and from a variety, in a variety of ways people use it in a variety of ways, but use it in risk screening. They use it in evaluating companies on how they manage their waste.

In South Carolina someone used the data to lobby the state government to pass the [unintelligible] Toxic Laws.

So it's a variety of ways and it's very useful. What the rule does for lead and lead compounds, which of course are toxic, [unintelligible] meets the toxicity criteria, is it lowers the threshold because these chemicals are persistent and they are bio-accumulative.

It does a number of other things. It doesn't allow for these chemicals, something known as the *de minimis* exemption which is an exemption that can be taken in certain instances, if a chemical is present [inaudible]

There is something known as the Form A, the certification that you don't have to require, report release amounts. That is not allowed for PBTs including lead and lead compounds.

Then there's range recording that has been used for a number of years and that's not allowed either.

And [inaudible] of lead and lead compounds the [inaudible] threshold doesn't apply. Lead is present in certain alloys.

Okay. Lead is metal by definition, [inaudible] and it's not going to be destroyed. The, one of the issues that we got is in the proposed rule of the bioavailability of lead and lead is bioavailable in the environment to various degrees depending upon environmental conditions.

[Inaudible] also indicate that lead is bio-accumulative in aquatic species and there's human data that indicates bio-accumulates. Given this, the persistence of lead and the fact that it is bioavailable and environmentally available and actually it's a better term, environmentally available in environment, in the environment.

It's highly persistent given the data both in the aquatic organism and in humans, lead, EPA has concluded, preliminary concluded that lead is highly bio-accumulative.

Our first two lead, in terms of [in-audible] are consistent with our approach to PBTs that EPA dealt with in a very recent action that was finalized October 29th. [Inaudible]

And part of this ties to the fact, what the [inaudible] organizations are doing. If the compound is highly persistent and highly bio-accumulative, they are looking for [unintelligible] and severely restrict.

This is pretty analogous to say essentially, any release, any release is not acceptable. I think I have skipped ahead of myself. I apologize.

So you [inaudible] a threshold approaching zero for that. We tried to take and do an account burden on the industry and therefore, instead of something approaching zero and one pound, we looked at a threshold of ten pounds.

As I mentioned earlier, lead and lead compounds is de minimis exemption which apply to [unintelligible] and other tradename products cannot be taken for lead and lead compounds.

The alternate threshold of one million pounds cannot be used for lead and lead compounds unless the Form A can't be used and as I mentioned, the range reporting can't be used for on-site releases and transfers offsite, released in other waste management.

EPA has another action going on, looking at alloys and looking at whether to accept the listed metals when they are in male [phonetic] families in certain forms. Because there is this ongoing action and we have, we don't have any final decisions on this—this is just completed on peer review, the technical analysis for the Alloys Project [inaudible] appropriate to extend the [inaudible] threshold, the [inaudible] contained in these alloys.

So that in summary is basically what this action contains. If I could just answer briefly, any clarifying questions, if there is something that I went over that is not clear.

AUDIENCE: I didn't understand what you meant. You said certain international organizations are seeking to ban [interposing]

AUDIENCE : [inaudible]

AUDIENCE: are these completely.

MS. DOA: Well there's a ... Certain international organizations are, there are international protocols for a group of chemicals and the criteria that they are using are close to the criteria, if not same to the criteria, that we use for the subset of PBT chemicals that are highly persistent and highly bio-accumulative. Okay? A half-life of six months or greater and bio-accumulation factor of five thousand, but they, with pro-

fessional judgment on the data. It's not exact, clear-cut. So they wasn't professional judgment in there.

What they are doing is a different protocol to look to phase out the use, ban certain uses, restrict the chemical. They are looking to eliminate releases, get concentration [inaudible] back to background concentrations.

That seems to be close to, essentially saying that we are concerned that [inaudible] meet this criteria any releases of concern. Okay. They are looking at use and release. We're, we're reporting the form. That's all we are. But if you just look at what they were doing, that would suggest that things that meet the criteria would ... Obviously no release would be acceptable.

AUDIENCE: Well is this rule in some sense, you know, move us in this direction? I mean I know it's a reporting thing but, is there any relationship between the two, I guess?

MS. DOA: Well I think ... No because what they are doing and what their [unintelligible] there's no relationship.

AUDIENCE: Okay.

MS. DOA: The only thins is mostly in the criteria that we looked at. And then the relationship of the criteria to what people from a policy perspective are saying, our criteria used the things where any release is approaching unacceptable. Or they are trying to get away from that release. But ... Okay.

MR. RICE: [Not optimally audible. Speaker not close to microphone.] Hi! My name is Cody Rice. I am an economist at EPA's Office of Pollution Prevention and Toxics and the topic of my presentation today is up here on this overhead, "Commenting on the Economic Analysis of the TRI Lead Proposal."

The reason I am making this presentation is that I am the person responsible for the economic analysis and I am also one of the folks who'll be reviewing comments on the proposal. So this presentation is to give you folks an idea, some of the areas of comment that, that you can help us out in terms of assessing the costs and benefits of of the proposed rule.

I am really looking forward to your comments on this proposal. You folks have experience reporting the TRI and using TRI data and we look forward to getting your comments.

There are four main topics of my presentation today. They are shown on this overhead.

First: What is the purpose of the economic analysis in the rule-making process? What are the major components of the economic analysis? How can the public contribute to the economic analysis and what are some of the areas for public comment in the economic analysis?

I expect this presentation will take about ten minutes. I will be glad to take any questions afterward.

The first topic is: What is the purpose of the economic analysis? And there are three main reasons the EPA conducts an economic analysis, for proposed rules. First it's to provide information during the rule-making process on the costs, the benefits and distributional impacts of various options that are under consideration.

In this case we looked at four different lower reporting thresholds. Secondly it's to meet the requirements of various statues and executive orders, and finally, to inform the public of data and methods the EPA is using, offering an opportunity for comments on those data and methods.

Moving on, the next topic is: What

are the major components of the economic analysis? The economic analysis is supposed to bring information to the rule-making process. What sort of information are we talking about?

There are four main components of the analysis: These are estimating the number of affected facilities which involves predicting the number of TRI facilities that will report as a result of the proposed rule. In this case we estimated the number of additional reports the EPA might receive at four lower reporting thresholds: One thousand pounds, one hundred pounds, ten pounds and one pound.

And I should point out that TRI facilities are, are found in a subset of all facilities, including those that are in the manufacturing industries, electric utilities, petroleum bulk terminals and a few other sectors. TRI doesn't include construction or contracting firms. It doesn't include dentist or plumbers or individual hobbyists who use lead.

At the ten-pound reporting threshold, which is what the ir proposal was, we have estimated that about 15,000 facilities would file additional reports on lead and lead compounds. And of these, we estimate that about 5,100 would be from facilities filing their very first TRI report. The other facilities are already filing for other TRI chemicals.

AUDIENCE: Nation wide? MR. RICE: Nation wide.

I should point out that we identified, in the economic analysis, a number of industries for which we didn't have enough information to make a quantitative estimate for the number of additional reports and that's one of the areas that we are looking for comments on.

Estimating the costs of the proposal

involves applying estimates of the numbers of hours it takes to report to the number of affected facilities and to the wage rates at these facilities.

I should mention here that facilities are only required to use readily available information or reasonable estimates in reporting. EPCRA does not require any additional testing, monitoring or analysis beyond what already goes on at the facility, for other purposes.

At the ten-pound reporting threshold we estimated industry costs of \$116 million in the first year and \$60 million in subsequent years. And these reporting costs decline over times as facilities become more familiar with the reporting requirements.

The third topic is estimating the distributional effects of the proposal which involves looking at potential effects on minorities, low-income populations, children and small economic entities such as small businesses.

In rules that require industry to do something, in this case--reporting--the potential impact on small businesses is often under scrutiny.

To assess the potential impact on small entities we looked at what the potential impact of one TRI report would be on facilities with ten or more employees and to do this, we modeled the revenues of small and large companies in industries that are likely to report and then compared our estimates of reporting costs to the, at the company level, to estimates of revenue for typical small and large companies, with low, medium and high revenues.

And based on this methodology we didn't find any instances of small or large companies that would be affected at an impact-level of greater than one percent of revenues. This may not be surprising since

we are talking about a maximum of one report per facility, that no additional analysis is required, and facilities are not required to change any of their production processes. They are only required to report and finally that the very smallest facilities, those with fewer than ten employees are exempt from reporting.

Final topic is the benefits of the proposal which involves describing the type of information that will be reported as well as the potential uses of the information.

Over time, TRI has proven to be a very powerful tool for empowering a variety of users, from the federal government to industry, academics, environmental groups and the general public, allowing these groups to participate in, in a dialogue about environmental impacts of toxic chemicals.

Unfortunately in our economic analysis, our analysis in the benefits of the proposal is a qualitative rather than a quantitative estimate. In other words we are not able to assign a precise monetary value to the benefits of each additional reports in the same way that we are able to assign a quantitative estimate of the cost of each additional report.

So I hope everyone is still awake now after that description of the economic analysis.

How can the public contribute to the economic analysis? Well it would be very helpful, if people would comment on the data, the assumptions and the methods that are used in the economic analysis. If you are aware of any other sources of data, that we could use to better assess the rule we'd be very happy to consider those.

I hope everyone that who has a detailed interest in the economic analysis was able to access it before this meeting. But if you are looking for a copy, you can get

one on line at, at this Web address: www.epa.gov/tri along with other information about the proposed rule, and other information about the TRI program.

MR. RICE: Finally I'd like to move into a quick description of some areas in the economic analysis that you might want to address in your comments. As I said before, this list is not exhaustive. You'll probably also want to look at the notice for the meeting and a proposal itself for other potential areas of comment.

The first potential comment area is the number of affected facilities. Are there additional types of facilities affected by the proposal that EPA hasn't identified? What activities involving lead are undertaken at these facilities? Are these activities common? How many TRI facilities conduct these activities? And how much lead is used or released by facilities of various sizes in this industry. Any comments you could provide on this topic could be helpful.

In terms of the cost of the proposal, we are asking whether EPA has correctly characterized the number of affected facilities and the number of first-time filers. Are there any other data sources the EPA should consider in coming up with this estimate? Based on your experience with TRI, how long does it take to prepare a report? What factors affect this? Are activities more or less complicated at small facilities? These are all areas that would be helpful.

In terms of distributional impacts: What are the revenues of small firms with facilities that would be required to report? What other data might EPA use to estimate the revenues of these firms and finally, would a rule that reports requiring on one chemical using readily-available information and reasonable estimates have a significant economic impact on small businesses with ten or more employees?

All of these are questions that have been addressed in the economic analysis. But, again, if you have additional data or additional things that the Agency should consider since this is still at the proposal stage, please give us those comments.

In terms of benefits of the proposal. Some areas that might be helpful for public comments are: What are the benefits of increased lead reporting in your community?

Secondly are there TRI facilities in your community for which you have no information on lead releases, waste management due to the current TRI threshold levels or exemptions.

In the absence of legal requirements, do you find that facilities are willing to provide voluntary information on chemical releases? All of these questions would help us assess the benefits of the proposal.

Some additional questions for the benefits of the proposal: Do you think that facilities can reduce lead pollution effectively without evaluating current releases and other waste management techniques? Do you think this information should be shared with the public? Do you think that additional reporting on lead and lead compounds under EPCRA would be valuable to users of TRI data?

And finally, in terms of burden reduction, do you have any recommendations for reducing the reporting, for reducing the burden on small businesses? Should EPA exempt small businesses from reporting on lead? If so, why? Should EPA exempt reporting on certain quantities of lead at low concentrations? If so, why? And should EPA select another threshold?

This is a proposal and what's been proposed is a ten-pound reporting option.

MR. RICE: If you have any questions I'd be glad to take them now and if you need a more detailed descriptions of any aspects of the economic analysis I'll be around here, so, at the break and after the meeting. [Inaudible]

AUDIENCE: Just so I understand you correctly. You are suggesting that this proposal would have no greater economic burden on a small business than one percent of revenues or?

MR. RICE: Right.

 ${\tt AUDIENCE}$: There are instances where you, where you estimated it would be higher than that.

MR. RICE: Right, based on our methodology which was a modeling methodology because we don't know the precise identities of every firm that will file. We modeled revenues at large and small firms and then within those groups, firms with low, medium and high revenues. And based on the expectation of one additional TRI report, we didn't find any instances greater than one percent, but as I, as I pointed out, if you have any information on, you know, the costs or the revenues of the facilities would be affected, that might change our conclusion that's why we are here.

AUDIENCE: I have a question. One of the things that we talked about before was the lead content in alloy. The American Wire Producers Association in a white-paper report that was published to people in the industry, reports that basic high carbon steel wire rod at 60 parts per million and doing some number crunching that's 83 tons of steel which is not a tremendous steel for companies, you know, carrying the SIC code of 20 to 39.

I guess I am glad I am not working for the EPA at this particular time. This just seems like a tremendous burden put on, put onto the EPA to, to follow this, this 83

tones of steel. This is steel that you people are sitting on. It's a, it just seems like a tremendous undertaking.

MR. RICE: Maybe Maria would like to [interposing]

MS. DOA: I mean ... I think we'd like to limit this right now to clarifying questions that I think this ... I would remind everyone that lead is toxic at extremely low, very, very small levels and in a neonate site, believe that there is ... the safe level approach is zero. So when we are talking about quantities that we are requiring reporting on also remember that lead is toxic at very, very low levels. Lead is very persistent. Lead bio-accumulates and it bio ... and they are data that it bio-accumulates in humans.

I also note, as I noted earlier, that we are trying to deal with the alloys and reduce the burden on, on the industry by exempting alloys above certain levels. We are having ... There are some issues that come up in peer review on what is an appropriate cut-off, but we are trying to do a scientific, a thorough scientific review in that.

And I think in terms of, of alloys, that's the appropriate way to address it, to address the issue.

AUDIENCE: So you are saying, the way in understand it, that even with a carbon steel which has such a small residual, 60 parts per million, that would, would not be affected by this rule? Because it is not an alloy?

MS. DOA: No, no, no. I am saying ... I think the point that you, you were making--unless I misunderstood and if I did, please disabuse of my misunderstanding--was that this was relatively very small quantities and you are dealing with certain alloys.

AUDIENCE: Right, right. When you

multiply that by, by just a very 'nother small quantity of 83 tons, you are talking about a 20 pound discharge.

MS. DOA: Right, right. I was bringing up some facts on lead, lead compounds about the, the very, the toxicity occurs at very, very low concentration, very low levels, the persistence in bio-accumulation and then my other point, and I thought that the alloys exemption for alloys above certain size limits, that won't degrade, would be an appropriate way to deal with this.

AUDIENCE: I understand. I am just saying alloys are ... There's lead intentionally put in these alloys.

MS. DOA: I understand.

AUDIENCE: Now there's a residual. I am not talking about just a residual in the ordinary steel that we use every day. [Inaudible]

MS. DOA: I understand.

AUDIENCE: It just, just doesn't [inaudible] a point [inaudible] major undertaking to even track 83 tons of carbon steel through the United States.

MS. DOA: No I understand your point. I was just trying to ...

AUDIENCE: I would like to just make a comment on the underlying principal, why the [interposing]

MALE VOICE: We are going to move into comments. I think maybe it would be better if we have people come up to the podium and make their comments. That way we can make sure that we [interposing]

MS. DOA: Well, well, the MALE VOICE: director for the recorder.

MS. DOA: Well could we ... We have a list of people who have signed up to speak and maybe if we could go through [interposing]

MALE VOICE : Oh, you have to sign up?

MS. DOA: go through that list of people first and then anyone who wanted to speak in addition to that, we could go through that.

MR. WISE: Okay. I am not talking negatively here. I would like to say something which is, something I am trying to understand. I work for a solder manufacturer and I hear persistent, accumulative, biological accumulation and I hear about bioavailability, children getting sick. Most companies today with the environmental regulations as they are, are very prudent and economically, use the economical feasibility of recycling most of lead products so that the actual digging and mining of lead as a biologically availability, available substance is very limited.

The present situation that is, has occurred with children getting sick prior to 1997, homes were painted with lead and children ate paint. Pica, children going to parks, road-side hobbyist where they do their camping out, camp-sites, are heavily loaded with soil lead based on gasoline, gasoline-leaded gasoline that has accumulated for many years. It takes just a storm and a dust storm to blow this dust in your home. I think studies have been done where cadmium and lead are in the dust that are being used.

Municipalities have treatment works which have pollution-control devices so that the particles of, or residuals are kept in its place. So I am trying to figure out in the TRI reports, how the reasoning is that the bioavailability of the material is still limited. You are kind of double, multiple reporting.

For example, if a company produces or uses two million pounds of lead as we do in our corporation and we report on the

availability or threshold of 25000 pounds, in casual use ten thousand pounds, and it goes down to our customers who don't take ten pounds and release this into the atmosphere. This is product that's used.

The chemistry of lead is such that the vapor pressure of lead is very low. It takes a lot of temperature, if you are using temperature in your process to omit any lead oxide fume. I am not talking about fugitive dust which again, regulatory or regulations do not permit any pollution to go out into the atmosphere. Most people have electrostatic precipitators, microscopic filters.

The Metro Park and Sanitary District here in Chicago in the municipalities throughout the state, control the water control. Fugitive admissions of people dragging things out on their clothing, again in the song [phonetic] where is minuscule.

You talk about economic burden, well it costs ten thousand dollars for a consultant to do a TRI report, even one item on that report. I have made inquiries into this. So it is an economic burden on very small businesses even with ten or more people.

Selenium is a toxic chemical that is in every cosmetic that one uses, big shampoos. This is going down into the sewer daily and maybe that'll be the next generation of toxic bio-accumulative materials, but lead, if it gets into the soil, doesn't biodegrade and contrary to the literature, is not leechable. Lead does not leech. Studies have been done where lead actually is incorporated into soil and it just stays in the roots. It doesn't get into the table, the water table.

I just think that more scientific work has to be done before burdening small businesses to do this and I think the horrendous paper work that would be contrived by this proposal would be horrendous, especially

to small companies. One percent seems very small to me. I have just wanted to research this prior to coming here and I find that it's about ten to 12% of the industry, small businesses that would be affected. So. This is all I have not to say.

FEMALE VOICE : [inaudible]

MR. WISE: I am not talking necessarily for my company or anybody represented here, but I just think that more data has to be gotten before, before regulation of this kind is, is implemented.

MS. DOA: Could you give your name and your organization?

MR. WISE: Yes my name is Mal Wise. I am Manager of Environmental Control for Litton/Kester Solder.

MS. DOA: Thank you.

MR. WISE: Thank you.

MS. DOA: Oh I am sorry. Sir, could you spell it? Your last name also?

MR. WISE: Yes, the name is W-I-S-

MS. DOA: Thank you.

Ε.

MR. WISE: Thank you.

MS. DOA: As I said if, not if but we'll go through the list of people who had signed up and then anyone else who would like to speak, we'd love to hear from you. The first person is Robert Hermanson [phonetic] from BP-Amoco. No. Ethan Schoolman from PIRG?

MR. SCHOOLMAN: I'd like to thank you all for letting me speak here today on the EPAs proposal on making to lower reporting thresholds for lead and lead compounds.

The Illinois Public Interest Research Group, Illinois PIRG is an environmental and consumer advocacy organization with 20000 members across the state. Illinois PIRG has used the Toxics Release Inventories Right-to-Know information for our research and has worked for many years to improve and

expand publicly available information about the use and release of toxic subjects.

We strongly support the EPAs efforts to give communities and citizens more information about lead pollution. Almost one out of every 20 American [inaudible] has dangerously high levels of lead in his or her blood which can lead to slow growth, delayed hearing or behavior and learning disorders.

While much of this exposure likely comes from lead and household paint, the widespread impacts of this lead poisoning demonstrates the threats posed by lead released in the environment. A 1998 PIRG study, [unintelligible] less than 35% of lead releases are currently reported to the public. While we support the EPAs proposal very strongly, we have some concerns it will continue to allow under-reporting of lead pollution and we are particularly concerned about some of the EPAs suggestions for reducing the reporting burden on the reporting facility.

Lead pollution represents a significant threat to human health and the environment. Increased levels of lead in the blood have been linked to a number of health problems including delayed physical and mental development in children and behavior and learning problems.

Since lead also persists in the environment as a toxic metal and accumulates in human bodies, it poses an increased risk for health. Some studies have found that lead can remain in our bones for up to 25 years where it continues a threat to [inaudible] health. In fact lead can be released from the bones during pregnancy where it can be even more dangerous, because it can be passed from a mother to her growing fetus.

While EPAs proposal thoroughly documents lead's ability to bio-accumulate including in humans, opponents of expanding public information about pollution is argued

that lead is not bioavailable in the environment, that it cannot be taken up by organisms, however, EPAs proposal documents the various environmental conditions under which lead may become bioavailability.

In addition, it is important to note that there our many examples of dangerous levels of lead exposure from environmental sources. In Silver [phonetic] Valley, Idaho, for instance, mining and lead smelting operations released lead into the environment for almost a hundred years. Residents of the area showed increased blood levels for decades after the operation closed. One government study found that after 20, 20 years after exposure, residents who had been exposed as children continue to have significantly elevated levels of lead in their blood.

In addition, the exposed residents showed reduced fertility, greater instances of nervous system disorders and decreased motor function and cognitive functions. This example makes it clear that once in the environment, lead does threaten human health.

Now because lead pollution threatens human health and the environment, the reporting threshold should be set at one pound. EPA should lower reporting thresholds to include all releases of lead or lead compounds.

The proposed ten-pound threshold although an improvement, is not low enough. EPAs own proposal states that the environmental and health information examined lead-lead and lead-lead the agency to suggest a one-pound threshold. We urge the EPA to put its mission to protect public health in the environment ahead of its desire to reduce burden on reporting histories and set a one-pound threshold.

The EPA should not weaken the TRI in order to lessen reporting burden. Numerous loopholes in the Right-to-Know Program al-

ready reduce burden on reporting industries at the expense of valuable public information. These include the limited number of industries which report their pollution. The limited number of chemicals which are all on the reporting list, the use of release estimates rather than monitoring, on the absence of chemical-use information, among others across various EPA programs, however, we strongly oppose any attempts to reduce burden which would limit the information being collected and disseminated or compromise the quality of information.

[Speed changes on tape]

... happened on a biannual basis, communities would be kept in the dark even longer.

For example, if a facility started releasing a cancer-causing chemical to the environment in 1998, under a biannual reporting system, that information might not be reported until 1999. It may not become publicly available until 2001, by which time the facility has already been releasing the cancer-causing chemical for three years, unbeknownst to the neighboring community.

We also oppose any expansion of current exemptions and limitations and we oppose any change that would require less-to-complete reporting.

The EPA mentions, in its proposal, an option for acquiring a given percentage of facilities releases to be reported. This option would be a significant weakness in the Right-to-Know Program. It could potentially allow facilities to stop reporting releases of specific chemicals or from specific sorts. In some cases these could be in most dangerous chemicals, which are often released in small but dangerous quantities.

In addition, many facilities release very large amounts of toxic chemicals. For a facility releasing hundreds of thousands of pounds of toxics every year, even requiring

90% of releases to be reported would allow tens of thousands of pounds of pollution to go unreported.

Again, we strongly oppose any burden-reduction measures which would limit the information being collected and disseminated.

In conclusion, we strongly support EPAs proposal to lower reporting thresholds for lead and lead compounds and urge EPA to strengthen the final proposal by lowering the threshold to one pound. We also ask EPA to put its mission of protecting human health and the environment, ahead of its desire to reduce reporting burden on polluting industries.

Thanks very much for letting me speak and I have one more thing to say. Just on comment by Mr. Wise earlier, that lead does not leach into soil. In fact, EPAs proposal does in fact thoroughly document under pH conditions, some of which may stimulate acid rain—or simulate acid rain, pardon me—soil—bound lead which the industry has argued is not bioavailable may leach into water where it's more available for both humans and organisms combined. Thanks.

MS. DOA: Are there any clarifying questions? Or one or two questions? Mr. Schoolman, thank you very much.

FEMALE VOICE: [inaudible]
MR. SCHOOLMAN: Illinois PIRG. PI-R-G.

FEMALE VOICE : [inaudible]

MR. SCHOOLMAN: Oh, PIRG stands for Public Interest Research Group. I have copies of my testimony if anyone would like some after the meeting.

MS. DOA: Thank you. Okay, Aby Jirka? This was a comment.

MALE VOICE : [inaudible].

MS. DOA: There doesn't seem to be ... Okay. Beverly McClellan, The Michigan

Federation? No. Tracy Struck.

MALE VOICE : All right.

MS. STOUVAC: I also prepared a statement, but I do have a couple of comments regarding, after some of the comments that you made. Oh.

I am with US Zinc. US Zinc is the world's second-largest zinc oxide producer. Our product is the central raw material in such items as tires, ceramics, glass, plastics, pharmaceuticals, Raisin Bran. We produce zinc oxide from raw materials ranging from primary zinc ingots to scrap metal.

This recycling process great, offers great benefits to the economy as well as the environment. By recycling this metal we are helping to reduce volumes of material that would otherwise be destined to landfills.

The net effect of the proposed lowering would actually increase rather than decrease the amount of lead in the environment as less scrap metal is being recycled and more is being sent to landfills.

Other industries such as the steel industry which is now able to sell to recyclers such as US Zinc, by-product furnace emissions, will no longer have an outlet for that material and it'll be forced to dispose of that material as well. While US Zinc maintains high quality standards for not only our product but also our raw material feed, trace elements of other metals is naturally found in both.

One of these elements is lead. Our products contain lead levels that range from ten parts per million to one thousand parts per million or 0.1% of the finished product. Our average product lead level falls well below the present de minimis exception level found in the TRI reporting requirements and until now has not presented a burden of additional reporting to our customers.

I can't remember exactly how many

people that you propose that this proposal will, will affect but I know that US Zinc, being the second largest producer in the world--we have about 33% of the US market share--that, that's 300 customers that, alone of our customers, that would, this would affect and if you multiple that out just from the customers that receive zinc oxide in the United States, it would affect at least a thousand companies.

The proposed limits combined with removing of the *de minimis* exemption will result in required reporting for almost every truckload of our product that is received. Even in our purest product, where lead is one one-thousandth of a per cent, many of our customers will have to prepare time-consuming reports. Some of our customers would actually find themselves with the raw material that is FDA-approved and safe to eat in our cereal, but not EPA-approved.

If we look at the end-products of our customers--and let's look at that--the end-products of our customers, zinc oxide makes up at most five percent of end-product, that's zinc oxide itself. Lead averages less than 0.1% of this five percent when calculated in average tire--the tire industry our number one customer--lead would be approximately one-quarter of one percent of a pound. And because zinc can be recycled again and again, many of our customers end-products are also recycled at the end of their use, creating a continuous loop that prevents this, these chemicals from ever being landfilled.

Let us overlook the fact, and this is an important fact, that one of the government's goals to TR reporting is not only to provide them with ability to track chemicals and their usage, but to ultimately serve as documentation needed to severely limit or completely prohibit the use of certain chemicals.

Maria made the statement that in international, other international countries that, that is exactly where they are going. They are trying to phase out completely the use of lead and I, I would, I would think that the gentleman from Illinois IPIRG, would also agree that, that is what they want to do is phase out the use of certain chemicals such as lead.

My argument would be that lead naturally exists. That's just the fact of, of, of nature. In reality it's a natural element, such as lead it cannot be forced out of our environment. It is not something that manufacturers have developed to improve profits. It is just the nature of the environment that we live in; it exists.

In conclusion we ask that the EPA reconsider such a drastic reduction in the current threshold and the removal of the *de minimis* exemption, realizing that lead is a natural element found in our environment and is inescapable as an element in many products.

Some of the side comments I would like to make is perhaps US Zinc is a recycler. We recycle material that is already in the system. It's, it's there. It's in your tires. Everyone of you drove a car today; it's in your tire. You cannot have a tire without putting zinc oxide in it to vulcanize the rubber. What's going to happen with that tire, when that tire is done and you, you, you prohibit industry from being able to recycle that material and take those dangerous toxic chemicals out of them and reuse them, where is that tire going to end up? It's going to end up in a landfill. Where's the lead going to end up? In a landfill.

Actually recycling serves a wonderful purpose for lowering the effects in the environment. And perhaps that's something that the EPA should consider, is an exemption for recyclers who try to take these chemicals and reuse them and disperse them so that they end up in end-products in such minute quantities to have very limited effects and I want to address that too.

I am the mother of three children. I want clean air, I want clean water just like anybody else, but something's are just reality. Lead exists and when you have businesses that use it in a safe manner and follow the, the, the rules and regulations to the tee, to make sure that it doesn't affect the community, or gives least impact to the community, I think that there, that should be recognized.

As far as the economic side, how this is going to affect economically the United States? How is it going to affect my industry. I already report for lead at my facilities; I have to--my customers don't have to, most of my customers do not have to, because of the de minimis exemption. How-ever, if it, if this proposal leads down the path that it is has lead in the other countries and, and, and contributes to phasing out the use of recycled material, it'll have a great effect on the United States.

Currently the United States does not have enough zinc ore available to meet their demands. We are importing more than half of our annual usage of zinc from other countries to meet our demands. Zinc recycling has enabled us to, to meet those demands. That'll be a huge impact on, not only my business, but on any business that is using zinc as a raw material.

There's a couple of other comments. I think Mr. Rice had a comment on his overhead that said; Can facilities reduce lead pollution without, basically without proposals such as this, that's going to make them be aware and documented? Can they reduce it? Those ...When they talk like that, when I

hear comments like that, that, that indicates to me exactly where we are going with this. It's the reduction and the phasing out of chemicals such as lead. I guess that's all I have to say.

MS. DOA: I have two clear ... I have two clarifying questions. On TRI, both releases including disposal are reported and recycling is recorded as mandated by Pollution Prevention Act, so both types of activities have to be reported.

I was a little confused when you said that people won't, will dispose it instead of recycling it, where recycling is higher on the waste management hierarchy and is looked more favorably upon by everybody I know, than disposal, so I was, I didn't [interposing]

MS. STOUVAC: Okay, If I, [interposing]

MS. DOA: understand the point.

MS. STOUVAC: if I am forced to use a different raw material when in fact, in actuality I couldn't even use a different raw material. If I take zinc ore out of the ground, lead is with it.

MS. DOA: No I understand that.

MS. STOUVAC: Lead exists, but if I have to stop recycling zinc because perhaps lead exists at a higher degree, where will that zinc end up? If I am not recycling it and turning it into something else, where is it going to go?

MS. DOA: But I guess my point is, it's better for someone who is sending that waste offsite to set, to send ... It looks better for them to report it as being sent offsite to a recycler than to disposal. I mean I just don't understand.

MS. STOUVAC : I understand and that's the way it is today. Right?

MS. DOA: And that's the way it will continue to be.

MS. STOUVAC: Well now except for the fact that now my customers have to report it, and what if my customers choose to ... I mean that's a heavy burden. That my customers have to report because of a *de minimis* exemption is being removed.

MS. DOA: I understand but it was the, the issue between the recycling and the disposal that I just wasn't clear about.

The second question, this proposal focuses on ... Lead and zinc occur together. I understand that. But this proposal focuses on lead and I was a little confused on what you said about cereals, that it's--I think you were talking about zinc being approved, not lead being approved in cereals--for children.

MS. STOUVAC: No, no.

MS. DOA: Lead?

MS. STOUVAC: We resell zinc oxide to industries that's, it's a USP grade that is approved by the FDA that is in many items that you use daily. Okay? As an impurity in that zinc oxide, lead exists. Even at 0.001 parts per million, you calculate that out, that, that customer could eventually have to report for lead, yes.

FEMALE VOICE : [inaudible]

MS. DOA: Okay. Then I just have one clarifying comment. Just ...I just don't ... TRI is used in very, very many ways, but one thing that TRI doesn't do in itself, is limit people. Now all we, all it does and all it is intended to do, is provide information. Now how people use that information, whether they want to use it to, to ask companies to limit releases or local governments want to use it, that's the use of the TRI data. But TRI data in itself does not limit releases.

AUDIENCE : [inaudible]

MS. DOA: Cannot, cannot by statue. It just is the [interposing]

MS. STOUVAC : The TR, you're, you're [interposing]

MS. DOA: collect information, put it in an electronic database for the public. That is [interposing]

MS. STOUVAC: But the purpose of the database is [interposing]

MS. DOA: The purpose of the database is to provide information to the public, including the public's surrounding facilities that report this information, to researchers, to local state and federal governments. This is ... It's in 313 [inaudible]. That's the direction and people use it in all those different ways; government use it, investment firms use it, communities use it, individual citizens use it. And there are a variety of reasons and it's not, it's not ... EPA doesn't prescribe how it needs to be used [interposing]

MS. STOUVAC: Your own statement was the EPA feels a safe level of lead is zero.

MS. DOA: I said ...No. I said it's a toxicant. I was talking solely about the toxicity. and not making a regulatory determination under TRI that in neonates, looking at the information, that the level approaches zero because it's my understanding there's no blood/brain barrier yet at that point, so any amount can reach the brain.

That's just a science discussion.

That is not a discussion on limits and it's not something that EPCRA, will be done because that's not what we are mandated to do. We are mandated to collect information on chemicals that meet the statutory toxicity criteria, and lead does.

MS. STOUVAC: Right. I understand that that's the purposes to collect information but I also understand and realize that the industry, that the purpose of collecting that data is, is varied and other people want

to take that data and get on scare tactics and reduce the use of certain chemicals when my point is, this is something that's natural. It's not something that we have gone to a laboratory and concocted up. It's something that comes out of the ground; it's in your ground, it's under your house, it's in your tires—it's natural. And we are taking a natural element and trying to disperse it to such small quantities that doesn't have the affect that you are trying to say.

MS. DOA: Are there any additional questions? Comments? Sir?

MALE VOICE : In retrospect to what this young lady is try to say [interposing]

MS. DOA: I am sorry. Maybe [interposing]

MALE VOICE : [inaudible] materials.

MS. DOA: Just a second. Do we need to have him speak into a microphone? And announce his name? Probably would be better.

MALE VOICE: Probably would be better.

MS. DOA: Could you come up, sir?

MR. WISE: [inaudible] The whole
idea of regulation stymies recycling. Many
years ago our company is a solder manufacturer, wanted to buy back all the used solder
dross [phonetic] and popped out things that
we could.

So we prevented from being bioavailable. Bio-available means that it has been mined out of the ground and that it is being used by human beings throughout the world. Recycling prevents bio-availability. If you regulate companies that can't afford consultants who are burdened by the economics even though the study might be well, well done, it stymies people from recycling them. They don't want to bother anymore, so it ends up in the landfill.

Many years ago, the EPA had been

very, very thoughtful in saying that any material that is recycled for beneficial use, not regulated, just the word [interposing]

MALE VOICE : Excuse me.

MR. WISE: just the word regulated means prohibiting recycling and it shouldn't end up in the landfill even though I believe and what I have read and what science does show me, that it isn't leached into the surface in water and I am not arguing your point where you'll say it is from an environmental standpoint, I think more work has to be done in this area.

There was a potpourri study done in Australia where it had no affect on the mental or psychological state of children. It was just that they came from economically deprived areas and they were just, didn't get the teaching and the learning that other people got. So a lot of thing on the certain ages of children have to be studied, more information that has to be gotten.

All chemicals and chemistry are hazardous. Any assumption made getting into the system can cause problems, but I think lead is taking an unreasonable ripping here from the standpoint of restraining recycling, by lowering the thresholds and at the same time, it's very difficult to get the diminutive, minus was it, 0.1 for cancer carcinogens in products such as a tire. There may be exemptions to that. But there's going to be a lot of people that just refuse to recycle and I think this is a prohibitive regulation proposal for that reason alone.

MR. BOER: I am Tom Boer from the EPA Office of General Counsel. I just ... I want to make sure I understand this because I still don't understand the point on recycling. If a facility under the, under the way EPCRA works, if a facility manufacturers, processes or otherwise uses—under this proposal as it is proposed—a manufacturer pro-

cesses or otherwise uses ten pounds of lead, they would be required to file an EPCRA Section 313 report, regardless of what they did with it, after it, through the manufacturing process, so whether they released it into a waste treatment that was dumped into a river or whether they collected it and sent it to a recycler.

I don't, I don't understand why it is that, that this proposal would limit recycling and then if the company has to fill out the form anyways, I mean if they are required to draw the EPCRA Section 313 form, then [interposing]

MALE VOICE : [inaudible]

MR. BOER: recycle. Wouldn't they would prefer to report recycling rather than the [interposing]

MR. WISE: Oh I think she answered the question when she said that a lot of her products have to be [inaudible] FDA-approved because it goes into some pharmaceuticals, approved product but it wouldn't be EPA approved. So I think it's over-regulation. There's too many agencies.

For example, if we have a regulation that states a certain control of something in a building and then there's a cross-reference of EPA coming into OSHA or some other ... It's redundant, it's just too many regulations. And people are just saying, going to say to themselves; We are not going to have this hauled away under EPCRA. We are going to illegally dump it. A lot ...

I think it leads to immoral actions by corporations. We had the regulation for DROSS [phonetic] and a lot of our customers were just throwing it out. Well economically it was a bad thing to throw it out and legally they weren't shipping it back to us, at that time, on the manifest. So deregulation sometimes helps improve the environment and I think in this case it could.

MALE VOICE: Thank you.

MR. WISE: Thank you. MALE VOICE: Sir, sir?

MR. WISE : Yes.

 $\ensuremath{\mathsf{MALE}}$ VOICE : You stated the company you work for?

MR. WISE: Litton/Kester Solder

MS. DOA: No you can go. I just wanted people to use the microphone because we are going to put a transcript of these proceedings in the docket. May be I will [interposing]

MR. WISE: Litton/Kester Solder.

MS. DOA: Go around.

MR. WISE: Solder. S-O-L-D-E-R.

Electronic molding, binding materials.

MS. DOA: Could you just state your name?

MS. GIRARD: I am Joan Girard, Electrotek Corporation, a printed circuit-board manufacturer as well as representing the [inaudible] Trade Association for the electronics industry.

First I do want to rebut what you said. I don't believe we'll illegally dump. I would like that strike actually but.

Addressing your question about the recycling. If you, you're going to eliminate the de minimis quantity, what may happen is people will want to use purer products. They may not want to used, use recycled, materials that will be recycled because there's going to be a higher level of lead in that material.

I am a circuit board manufacturer and we are proud to say that we use 100% recycled copper. We use copper cladding on circuit boards and we are trying to get the lead out of circuit board manufacturing but lead is still exists in assembly and our, you know, people who put components on circuit boards. Therefore we do have customers that require lead on the surface as well, so we

are a tin/lead alloy user as well.

But all of the copper cladding comes in. We don't have lead content on our copper-clad materials. They have denata [phonetic] sheets. However this may change. Because of the de minimis, which means that every piece of copper clad, now I am, I report for copper. All right? Copper is a metal that we do report for; we exceed the threshold. But now we are going to exceed threshold for lead at ten pounds. I mean I am using ten lead, much less than the current threshold quantity.

But now obviously I'll be brought into this at ten pounds, but you are asking me now to calculate all the trace lead in all the other metals that we are utilizing; tin, nickel, gold, copper [interposing]

MS. DOA: Could I clarify? Could I clarify something.

MS. GIRARD: Okay, go ahead.

MS. DOA: I want to go back to what Cody said because this is my [inaudible] what you are saying.

MS. GIRARD: Okay.

MS. DOA: You have to use the best, readily available information. And if you know that there's possibly some lead or some other metal in with that copper but you have no idea what's in there.

MS. GIRARD: I did hear that this morning. However, I think what's going to happen is copper recyclers: They know the quantities of trace metals, and I know we got some metal recyclers out there. You do metal assays on all of your metals that you are sending out and you are producing products. You are producing for us, for example, copper clad. They know trace metals.

So it's going to the laminate manufacturers who are going to produce copper clad and they are going to say; Well, okay, there's trace metals of lead in this lami-

nate--we call it indolaminate [phonetic], it's fiber glass coated with copper, -- then it's going to go to the circuit board manufacturer's raw material data sheet for laminate which is an article component with trace, trace levels of lead on it and now here, as I said, as a circuit board manufacturer now trying to calculate--I do have to calculate every pound of copper that comes into my facility because I exceed thresholds-but now I am going to have to calculate every pound of lead that comes into my facility in trace amounts, that I am shipping out on an article component.

Lead is a regulated recyclable material; all solder drives, all ... should be a waste lead I sell. I mean this is a valuable commodity for me. It is a waste material, but it is valuable. There are people out there using my lead. I am selling it to you. I am not just giving it away or dumping down ... And I really want to rebut the fact that people are going to illegally dump. I do not believe that's going to happen. This is almost the year 2000. We are all concerned about our kids.

But what the *de minimis* does, it brings all of the ... It's this trickle-down effect to everybody, and now, I have this huge burden. There are, there was at one time, over 2500 circuit board manufacturers in the United States. There are now less than 730 circuit board manufacturers and there's a reason because of it. There's a reason for this. And now 80% of those 730 circuit board manufacturers are small business. Many of them not even having to report copper, never brought into the TRI program.

When you said 15000 nationwide, I really questioned that number. Because the majority of business in this country is small business. We are what made, we are, we are what is making this country great economi-

cally, is small business. And I think many, many more facilities than you could even imagine will be brought into this as a result of the, of the lead reporting being lowered and then the *de minimis* issue, and I ...

That really needs to be looked and, and going back to originally why I walked up here, the recycle, when they said things may go to landfill instead of recycle, it's because then everyone is going to want pure, pure, pure, pure-as pure as you can get. When we are using 100% recycled copper. We ought to be commended. Yet the trace levels of lead in our copper is going to be much greater than it was going to be if we have somebody ore it. But the amount of hazardous waste generated from oreing metal is, you know, 50 times greater than the environmental concern of the trace lead that's in the copper that's on our circuit boards.

So you really ... That needs to be, you know, evaluated. The true, trickle-down effect of this. Because it is huge. I think much greater than what you anticipate.

 $\,$ MS. DOA : Could I ask a question? In terms of the information that you get from your suppliers.

MS. GIRARD: Yes.

MS. DOA: On all the components, are you getting that right now?

MS. GIRARD: Well.

MS. DOA: The trace metals?

MS. GIRARD : Currently? No. We
are [interposing]

MS. DOA: Or is it just tied to the OSHA HAZ-COM levels or is this [unintelliquible] different?

MS. GIRARD: Right, right. You know it's, it's ... Material data safety sheets are, you know, under the Hazard Communication Standard. They all have de minimis thresh [interposing]

MS. DOA: Yes.

MS. GIRARD: threshold, you know? Sure. They could put, you know, less than one percent arsenic or 98% grape jelly in it and not tell us. Yes.

MS. DOA: So this is information ... You won't have information on these trace levels?

MS. GIRARD: But the people manufacturing those products know the information.

MS. DOA: Right.

MS. GIRARD: They will have to put it on the Material Safety Data Sheet now won't they?

MS. DOA: No.

MS. GIRARD: They won't?

MS. DOA: No.

MS. GIRARD: Because of the HAZ-COM. They got the loop hole at HAZ-COM. They won't have to tell us? Even though we are required by EPCRA to not report under de minimis?

MS. DOA: You are required to use your best readily information.

MS. GIRARD: But will they not provide the information, now knowing that we are required by law to submit the data?

MS. DOA: The supplier notifications weren't extended to that.

MS. GIRARD: Hmm?

FEMALE VOICE: Will she be required to do this analysis on every bit of [interposing]

MS. DOA: No. You are not required to do any monitoring, any testing. You are required to use the information that a reasonable person in your scenario would be using. I mean [interposing]

MS. GIRARD: But that [interposing]

MS. DOA: and have readily, ready access to. Right. So.

 $\ensuremath{\mathsf{MS}}$. GIRARD : But what about my product?

MS. DOA: The information comes, the information [interposing]

MS. GIRARD: But I don't do assays on my product and I am shipping on my circuit board, to which many have tin/lead on the surface--customer requirements. I am shipping as an article component. This is a usable product. You are sitting, everybody is sitting here with a cell phone or with a computer or this overhead, has a circuit board in it.

MS. DOA: And for the downstream user it's an article and so there's an article exemption.

MS. GIRARD : So I am exempt?

MS. DOA: No. They are exempt. Your users are going to be exempt. The people that use the article.

MS. GIRARD: But [laughter] but why I originally came up here to address your concern [interposing]

MS. DOA: Oh sure.

MS. GIRARD: about recycling.

MS. DOA: Right.

MS. GIRARD: That is one of the concerns.

 $\,$ MS. DOA : Right, I was just trying to clarify.

MS. GIRARD: Well, you know if that's, if what you say is, this happens. I mean, right? I don't, I don't necessarily agree that, that, that laminate manufacturer is not going to not put this on his MSDS and is not going to bring me that into calculating and reporting. I don't ...

MS. DOA: But then you know, see? If they provide you with that information, then you [interposing]

MS. GIRARD: But on the flip-side of that, I am brought in anyway now, because I do, I do place tin/lead on the surface of the circuit board, so where I was not reportable, I am now.

MS. DOA: Yes.

MS. GIRARD: And this, to calculate now, it's huge for me to calculate the amount of square footage of lead I put on a circuit board that ships to a customer that goes to recycle. Everything that we generate is recycled. Every piece of metal in our facility, but now I am added, I have the additional burden of lead as well. And it's great, just for me individually and there are many facilities out there that don't employ someone in my position.

I mean we are a small circuit board manufacturer and likely our attitude in our company is to employ me full-time. Speak around the country and get involved in our Trade Association and how many out there are not employing someone like me full-time? And now there, they're running their business like I do now, pht! They put ten pounds of tin lead on the surface, they are brought into this and like someone said; Ten grand for a consultant. Bring them on in. Calculate all the amount of metal that goes out on that circuit board. This is incredible!

Yet the end-user, you know, the consumer is putting more metal in the landfill when they throughout their computer, you know, their VCR. You know, do you own those? You throw them away. Your, you're telephones—anything you put in that garbage—and they are not regulated. They are throwing away hundreds of, you know, thousands of pounds of circuit, you know, circuit boards on their consumer end-product, yet if you put ten pounds on that, now you are brought into the you know.

You are required to report. To me, I think we, it's gone, going beyond ... It's the diminishing returns. I don't see the cost-benefit analysis [laughter] here. We have gone beyond that. You know? We are getting to the point where we are beyond, you

know, the benefits; you are beyond that. So I think you got diminishing reports at this point.

MS. DOA: Thank you. Are there any [interposing]

FEMALE VOICE : Ms. Doa?

MS. DOA: Yes.

FEMALE VOICE: I have a question.

If what you are saying there will be no [in-audible] part required and [inaudible] users will only get to use readily available information. How accurate will this reporting be? If they only have to use their best guess? And will, will the [unintelligible] of that actually weigh out?

MS. DOA: I wouldn't call it their best guess. I don't think that's an accurate representation.

The statute requires that they use readily available information, that they use monitoring. If monitoring is required under The Clean Air Act, The Clean Water Act. They have to use that information.

FEMALE VOICE : [inaudible]

MS. DOA: They have to use information at the facility. You know it can't just be looking at one process and not looking at information that comes in through purchasing. I mean you have to use information, but what the statute doesn't do is make you go out and monitor.

FEMALE VOICE : Oh.

MS. DOA: You know? And assay things, and test this, and test that.

FEMALE VOICE: I have one more.

MS. GIRARD: There was also a lot of conversation regarding ban of lead in other countries. Okay. And we are doing a lot of work on this. Obviously in the circuit board industry this is a huge problem.

There is no substitute tin/lead solderable alloy other than tin bismuth. Now they are looking at tin/silver. Tin bismuth,

if we were to utilize bismuth in our industry alone as a, a, solder, a tin-solder alloy, use tin bismuth, we would run out of the natural, the world's natural resource of bismuth in less than 20 years.

Okay, now tin/silver. Well the cost of silver, come on. And now, the environmental aspects and the toxicity of silver is incredible, yet not near the amount of scientific study has been done on it as has been done on lead.

Also recyclability [phonetic] of lead. We have all sorts of outlets to recycle lead. We have this system down pat, but now we are going to introduce a new lead alloy like, you know, tin/silver or tin bismuth--which we will run out of--because we want to ban the use of lead. Yet we have no recycling options for this. This is incredible!

Yes, people are talking about in the, the European ban on lead is, is being very, very closely looked at. We are trying to, obviously say; Step back, do environmental health safety impacts of, you know, this alloy as opposed to tin/lead and you know, the ... Japan is also looking at it very closely.

In our industry obviously what are we going to do if they ban it? We can't export anything. So we are very concerned about this on a global aspect and on an economic aspect as far as our abilities to do business overseas, if the ban does happen.

And they have not, have not, done the work. And looked at the total environmental health and safety impacts of the other alloys as opposed to lead, of which we have systems now available, operating very, you know, environmentally sound management systems to manage lead.

And, you know, I just wanted to clarify. People weren't clear about what's

going on because there has been talk about it, you know, overseas. Yes, that talking is true. People are talking about it. Yet, we

You bet your bottom dollar, we are trying to get them out there to do these scientific studies because they are not being done and let's face it, silver is very, very toxic as well. And that's the only other alloy available. Yes?

MS. DOA: Could you state your name again for the [interposing]

MALE VOICE : [inaudible]

MS. DOA: Oh I am sorry. Could you give me your name?

MR. JOSENDALE: Peter Josendale.

MS. DOA: Peter Josendale. Okay. Wire Rope Corporation of America.

MS. DOA: Yes.

MR. JOSENDALE: We are a primary ZO user and a zinc user and a number of other areas as you stated in reporting we have to use a reasonable knowledge of the content.

From my experience a large majority of small materials that we use would contain possible trace elements. Are we then, because we have knowledge is, is possibly there, required to go back to the manufacturer and determine that amount so that we can be sure that we are reporting correctly?

MS. DOA: Okay. The question was there, he has reasonable knowledge of the materials, that certain things are present in the materials, but you don't know what the concentrations? Are you required to go back to the manufacturer? I think it's suggested that you go back to the manufacturer, but you are not required and in their reporting package there is guidance that if you have no information on the concentrations and cannot reasonably ascertain it based on your infor-

mation, that you need not include that.

Now, if they provide that to you, you cannot ignore it. Certainly. Was that clear or no? Okay.

Are there any follow-up?

MALE VOICE: [inaudible]

MS. DOA: Oh right. Sure.

MALE VOICE : I don't want to step on anybody's toes. [Inaudible]

MR. JACOBS: My name is David Jacobs. I am with Northwestern Plating here in Chicago. I am here on behalf of The National Association of Metal Finishers and also on own behalf.

We are a small, we are a small company. We employ about 30 people on the southwest side of the city and we do electroplating. We apply a metallic coating to another part, for a variety of reasons; decorative, functional, for corrosion resistance.

So after a fashion, part of the essence of our industry is environmental protection. One of the things that we do is zinc plating and that is to protect parts from rusting, so they don't wind up in a landfill—we can use them longer.

Our concern with this proposal is two-fold. We are concerned about the burden it would place on businesses and while I understand Maria's point that EPCRA 313 doesn't provide for additional testing, we can reasonably expect to see lead, not only in the anodes that we use to plate, but in the materials that we need to bring onto our shop floor and being a job-shop, we have a customer database of over 350 customers, each sending us different material; some of them zinc dye-casting, some of them wire forms, some of them out of stainless steels, some of them out of brass. And we can reasonably expect to see lead in all those, but we have no idea what those levels are and it's tough for us to go back to them, because they are not

our suppliers, they are customers, and demand from them what the lead levels in those materials are.

I am also concerned because I am going to have to do--I myself am the one that is actually going to have through and do all these calculations and make all these estimates, reasonable or otherwise -- to determine the amount of lead that has gone through my shop in a different year. And I am going to come up with a number that is going to be almost entirely meaningless because I am just going to be working with estimates. I'll be able to get some estimates out of some customers. I'll be able to get estimates out of my suppliers, perhaps, of the lead content of the anodes and the lead content of my chemistry, but they are all going to be estimates and I am going to multiply them together and I'll have an estimate amount of lead that I brought into my shop.

Then we'll have the lead outputs of my shop. The water, I do have very good numbers—we are required to measure that here in Chicago, if you discharge the Metropolitan Water Reclamation District—so I have got lead numbers for that.

I also create a sludge. It's a byproduct of my waste treatment system. It's F006 sludge and since it's hazardous by definition and not by characteristic, I am not required to measure what's going out in there. I am sure, perhaps, there is some lead content in there, but again, I am going to have to estimate what is going out the door.

So the other part of my concern is the, the quality of data that is going to be generated up, from this, from this change in the rule and what's going to happen to the perception of my industry. I am going to be multiplying all these guesses and estimates and best engineering judgments together and I

am going to come up with a number that's really, in the real world isn't going to be meaningful and that's the number that people like Illinois PIRG are going to look at and say; Your industry is doing this with lead and you've dealt with this much. Now what are you going to do about it to change it?

And I am not going to ... It's going to be tough for me to defend that because I don't know if that number is accurate or not.

The point is, the additional burden placed on industry is going to, it's going to create data that is going to be junk, basically, and it's unfortunately because every minute that I spend trying to come up with engineering judgments is one minute less than I can spend doing actual pollution prevention work in my shop. I ...

Filling out a form does not change the way that I do my processes, especially when it comes to something like lead which I really have no control over the [unintelligible].

I'd like to thank EPA for holding these meetings and soliciting public comment. Any questions? I was that clear?

MALE VOICE: I just have one question. If this gets passed, and we have all this meaningless information, how long do you think it will be before that they tell us that we have meaningful information? And make it more [interposing]

MR. JOSENDALE: Boy you are asking the wrong person on that. It's my contention that if you want to talk about TRI in generation, I think a lot of the data is meaningless because of the way it is collected, because there is so many judgments and guesses and what not in there.

I think there are a, I think, I think they have a lot of data quality problems, in general, and I think, I think this rule will do, will help to perpetuate that.

MALE VOICE: Thank you.

MS. DOA: Can I ask you a question?

MR. JOSENDALE: Sure.

MS. DOA: One is because you said you, do you think all of your data is bad because you said your water data ...

MR. JOSENDALE : I don't think ... Oh, with lead?

MS. DOA: Well. Talking about your data.

MR. JOSENDALE: Sure.

MS. DOA: When you have monitoring, 'cause you have monitoring data for water.

MR. JOSENDALE: Yes.

MS. DOA: And just sort of to clarify, one of the things that [unintelligible] follow-up in your question, one of the things that is done with egesftion is that you indicate whether it's based on monitoring data, published omissions, factors.

MR. JOSENDALE: Yes.

MS. DOA: Other factors or mass balance, so there is some, some, some way to [interposing]

MR. JOSENDALE: Certainly on the form there is a way, a way to clarify where that data came from.

MS. DOA: Right.

 $$\operatorname{MR.}$ JOSENDALE : Yes. Is that done in the PDR? I don't remember.

 $\,$ MS. DOA : It's on the form and it's in the database.

 $\mbox{MR. JOSENDALE}$: It's in the database.

MS. DOA: Right.

MR. JOSENDALE: But when you do the data release [interposing]

MS. DOA: Right.

MR. JOSENDALE: you really don't say.

MS. DOA: Because when you aggregate things [interposing]

MR. JOSENDALE: Okay.

 $\ensuremath{\mathsf{MS.}}$ DOA : are different types of things.

MR. JOSENDALE: Okay.

MS. DOA: But my question was, so you think even when you are monitoring data it's not good?

MR. JOSENDALE: The monitored data is very good. Yes. So, there's one, that's one piece of the pie that goes into this form, as you know, Maria.

MS. DOA: Yes, I know.

MR. JOSENDALE: And that's so [interposing]

 $\ensuremath{\mathsf{MS.}}$ DOA : I just do want to clarify that.

MR. JOSENDALE: So, yes, there's ... I have, I have one piece, when it comes to lead I will have one piece of very good data and then I will have about ten pieces of data that are, that are all guesses, basically.

AUDIENCE: What do you think about the ideas of [inaudible] Corps. lead like [inaudible] recycling.

MS. DOA: Could I repeat the question? This is Ethal Schoolman for Illinois PIRG and his question was: What do you think of the idea that this rule will discourage recycling?

MR. JOSENDALE: My company handles and my industry in general, handles recycling in an entirely different manner so I don't think I could speak, I don't think I could speak definitively on it. We recycle our sludges but that is completely different from what's going on in the other industries. I couldn't speak intelligently on it.

Good, thank you!

MS. DOA: Any other comments? [End Tape #1--Side A]

[Start Tape #2 -- Side A]

 $$\operatorname{MR.}$$ BOER: ... the fact that Eckerd does not require monitoring is a congres-

sional proposed mandate that is in the statute. So, EPA could require companies to monitor in their reports to anything filing a TRI reports regardless what EPA may or may not want to do. It is Congressionally mandated in the way the statute is written, so and the way the data is reported is within the confines of how the statute was drafted by congress.

AUDIENCE: Well, is that the case. [Unintelligible] made a comment of [unintelligible]. If you can't monitor it and [unintelligible] mostly guessing.

MS. DOA: Maybe this issue of guessing in AMA [phonetic] one, there are no additional requirements for monitoring. Many people report using their monitoring data, their air monitoring data, as Mr. Jacob said, as water monitoring data they will use the quality, the level of information or the quality of the information does vary.

Okay, somewhat, but one of the things this does is it lets you know how a facility is managing their releases. Is it going primarily to air or is primarily going to land? Are they sending to somebody off site? Are they sending it across the state to somebody in your community or are they sending, how they're sending it to be managed? Is it going off to be recycling? Is it going off to be sent into a landfill?

I heard earlier someone said that there were no releases to air. Well looking at the TRI databases, yes, there are releases of lead to air. I mean, the majority of the way that the waste is managed, the majority of it is recycled. Okay.

Smaller quantities are released. Of the quantities that are released, the majority is sent to land. But there is also releases to water. There are releases to air and one of the thing this also provides you with is, we're in Chicago, I grew up in Michigan, is what's going to Lake Michigan. So, what is going to the Detroit river? The Chicago river. So, it gives you that information and for some of the sources there is no information on their sources.

Also, people are concerned about large releases but you may be living where there are a number of smaller releases from large or small companies. The releases are smaller but you are in an area where there are a number of facilities.

So, it does provide different types of information at different levels. I know, and if I may add, because we are also focusing on releases, a lot of people, especially in the last three or four years are focusing more and more on waste. The issue of waste and the waste management and as I noted the PPA requires Congress mandated us to collect information on recycling because I know some people think that recycling shouldn't be [unintelligible] but EPA is required to do that the way that, anyway, so.

Could you say your name?

MALE VOICE: Mike McKinnon with
Brothers Galvanizing.

MS. DOA: Mike McKinnon, Rogers, Brothers, Galvanizing. I am sorry I have to say it in here so [unintelligible] the transcript.

MR. MCKINNON: I just, the overall concern I have is as I understand it and I will admit my understanding may not be as thorough as it needs to be is that the ultimate interests is supplying the emissions or those things are going out to air and those things are going out to water and those things are going out to land, if the basis of recording is the amount of lead that may be utilized into a process, I was not here in time to hear some of the other speakers but those two that were mentioned, the products that are going out is where the vast majority

of any lead would be, is going into the product that is being done. Our major input into our product is zinc.

Zinc is taken from the Earth. Zinc has trace amounts of lead into it that zinc is being applied to the product that is being sold to many different customers. The amount of zinc that actually gets into a waste in our system is a percentage of the zinc used is extremely small.

The amount of lead in the zinc is extremely small, so the actual emissions are very small. So, if you take something and you look at the volume of lead that might be used into a system and use that as the basis of reporting when you are taking it down to the small amounts of it being commented on and then the small percentage [unintelligible] emission creates a huge reporting requirement and related expense for many companies for what are extremely small amounts of pollution.

MS. DOA: I am going to summarize that for the [interposing].

MR. MCKINNON : Great.

MS. DOA: The majority of the quantities that are at the facility are quantities that end out going out in products.

There are very small quantities of zinc and lots of lead that goes into the waste and, thus, the relative amount of these compounds that are these metals that are going out into product versus what is in the waste is the ratio is high and basing the reporting on what you manufacture/process is [interposing].

MR. MCKINNON: A lot of lead used in the process. Like right now it is about ten thousand pounds in the process. The recommendations are a thousand, a hundred in tank one, when you look at the small percentage of lead that comes in there that actually goes into a waste stream versus a product,

you know, it might be a tenth of a pound. It is going to be reported because of the small amount of lead that might be utilized in the process versus the percentage of the exhaust.

MS. DOA: Okay.

MR. SCHULMAN : A comment.

MS. DOA: Sure.

MR. SCHULMAN: [unintelligible]. Very short answer. [Unintelligible] Our researcher has showed that lead is extremely toxic in very small amounts [interposing].

MS. DOA: Do you want to repeat it or do you want me to repeat it, Cody?

MR. RICE : Go ahead.

MS. DOA: That was Ethan Schoolman of Illinois PIRG and he said that we were talking about very small amounts that go into the waste. Our research has shown that very small amounts are toxic and can cause adverse effect.

MR. MCKINNON: I would acknowledge that, however, where did the source of the lead come from to begin with. If it's taken from the ground, if your, it's in the waste stream that's being put back into recycling, you are putting no more lead back into the system that was taken out.

MS. DOA: The response is it was taken out of the ground and when you recycle it, you are putting no more back into the system that was there originally because it is a metal and it cannot be destroyed, so it just, [interposing].

 $$\operatorname{MR.}$$ MCKINNON : We are not creating something.

MS. DOA: Well, I think that by and before you came in and as you said by definition, I mean it is persistence [phonetic] because it can't be destroyed.

 $$\operatorname{MR.}$$ KALINA : To save your vocal cords, Maria, I will stand at the microphone here.

My name is Dale Kalina with [unin-telligible] and Donnelley & Sons company. We are a printer and we are a TRI reporter, but I am also here somewhat on behalf of the printing industry that I am quite involved in the trade organizations.

What I have to say is more along the lines of observations and clarifications and it is necessarily comments on the proposed rule and we kind of got some of it the presentation directly into the comments and so I didn't really have a chance to raise some of these points earlier, but I do think that based on some of the comments I am hearing, there does appear to be I would say significant confusion about the impact of this on the industry and the value of this to, to educating the community as to what's going on there.

So, I would just like to kind of go through a list of things that I would like to have some discussion on and perhaps that would help us understand a little bit more of this.

Primarily in reviewing the preamble and the proposal, there are a number of things that kind of popped out at me that obviously in EPA's analysis of lead emissions, there appears to be an assumption that there are a significant number, fifteen thousand roughly, facilities that fall in the less than ten thousand pound category but more than the ten pound category that will have release, reportable releases under TRI.

It's not entirely clear to me what those industries are based on the comments of the circuit board manufacturers, I think some valid points are raised there that if a facility is using ten pounds lead solder and incorporating that into a product that is going out and there is virtually, you know your limited or virtually no waste on that, the merits and the benefits of filing a Form R to

address those what appear to be very inconsequential releases to the environment seem extremely limited.

So, I would be very interested in perhaps a little discussion to understand the universe of sources that would be captured by the ten, the hundred, the thousand pound categories. The estimated quantities of environmental releases of lead from those various sources that are or would not be caught if the threshold is changed.

Secondly, I think that the points about supplier notification and the readily available information are quite important. I think it's correctly stated that, yes, there is no supplier notification if you are less than the one percent category for lead. However, based on the discussion here and certainly the observations of people and in our dealing with suppliers, that if a compound is on a list and whether it is the TRI list or any other list, there is a tendency and quite a tendency for people to feel compelled as a supplier to report that information whether they are obligated to regulatory or not.

And I think one of the things that has to be examined a little bit is the cost for suppliers of materials who may now feel compelled and likely will either be asked by their customers or feel obligated on their own to do more extensive testing and analysis to provide information for these low concentrations of trace contaminants that may be present in their products and I think that's probably a cost that has not been captured in the economic analysis.

Another issue that was raised, just sort of touched on, is the article exemption. A lot of facilities use lead-acid batteries and I think clarification at least that as a user of the lead acid battery that won't contain more than ten pounds of lead, when I dispose of that battery and hopefully it be-

ing sent back to someone who is recycling or [unintelligible]. What are my obligations as a facility owner or operator to file a Form R report for that material.

The other point that I think that has been touched on is the amount of information, or the amount of new information that may result from this. In reading the preamble and on page 42, 42236, the statement made that the one pound reporting threshold is being removed for this compound based on the fact that releases of less than a half-pound would be rounded to zero and I think the statement was significant amounts of releases would be missed if people are not required to report down to the tenth of a pound category.

This to me implies that there are a significant number of very small releases out there and I guess the question is if most, if a significant number of releases are going to be less than a half a pound is the cumulative amount, is the amount of information that is being provided by these new TRI reports for these small sources going to be of significant value to the public.

Data quality is another thing that has already been touched on. I am concerned that there are sort of two approaches one could take. One is the objective approach. My [unintelligible] currently don't have any information. I don't have any monitoring data. I am going to pretend that there is no trace contaminants in the materials that I've used and, therefore, I am not going to do any research and not report.

Ranging to the other end of things, is that I know I am buying zinc or I know that I have solder and I am going to do a very meticulous report.

So, I think there are going to be sort of two schools of thought on how to track this down. Certain companies, I think,

would be very meticulous and do a very good job. Others will essentially ignore it.

So I think that data quality that will reported to the public is going to suffer a lot and then coupled with the fact that there will be a lot of estimates thrown into a mix, I think that is put into question for these, again, for these small quantity users, what the value, I mean, what the information that will be available.

Incorporation into products, I think, is another thing that has been raised and I touched on it a little bit earlier. If the bulk of the lead that I am using is fully incorporated into the product, by dropping the threshold from ten thousand pounds to ten pounds, is any new information being captured and provided?

And I think the other area that I think is important to touch on is that there are releases and then there is public exposure to those releases. Materials that are being recycled. Materials that are being properly handled as hazardous waste or by other means will have reports but the question really is, is there a public exposure to these and certainly that kind of goes back to my earlier point, obviously, there are certain industries that are large quantity users, large quantity emitters, and may have widespread distribution either due to smelting operations or whatever and then there are going to be these small sources that will have very limited releases and hopefully as the speaker from the printed circuit board organization mentioned, that hopefully these materials are being handled in a responsible manner, being recycled, and that the amount going back into the environment really is a net zero.

The other couple things that I would like to comment on, I think, excluding the Form A option really does increase the regu-

latory burden on facilities knowing that you may exceed a ten pound of that as the final value is one thing. Being able to document and estimate properly and quantitate properly a tenth of a pound release is a much bigger challenge, so I think there is a significant increase in the regulatory burden if the reporting ranges or the Form A option is removed.

Those are just a few thoughts I have had. I think I will welcome EPA's comments on those areas just to help me as a potentially effected company understand the implications of this and also to try to put this into a little perspective.

FEMALE VOICE : Maria.

MS. DOA: A real straightforward answer is it's the batteries. The article exemption, if you dispose of something that's sold like an article it is not reportable after you've used it. So, that's historical [phonetic] and that's in the reporting packages and the example in the article exemption.

Part of my response really has to be with what EPA is. What it requires? EPA requires once you manufacture, if you manufacture, process, or otherwise use something in excess of the threshold quantities, you file a report. There is nothing based on how much you release. There is nothing that triggers reporting based on how much you release. There is nothing that you are reporting based on how much waste you have. Okay. Just if you exceed the threshold report.

This rule making was based on the chemicals on the list based on its toxicity. Okay, that has nothing to do with how it's used. A chemical is put on the listing solely on the hazard of the chemical. Is it reasonably anticipated to cause a certain adverse effect. Cancer. Not has it been shown in the last year to cause a risk to a par-

ticular population, but that's their story.

The threshold is being lowered based on the fact that lead is highly persistent and that they thought both the aquatic and the human data is highly bio-accumulative.

We historically don't believe that we should, or we are directed to, for the most part except for certain exceptions, for example acute toxicity, required or should make a risk finding. That's not the purpose of the statutes. We don't control the releases. The purpose is to provide the information on toxic chemicals.

And in terms of releases, I don't think we, here I turned out to be the best means of telling and determining what are, where it's being released. To what media it is being released. So to do that before we even get the information we've historically believe and continue to believe that that's problematic and I sort of want to give you the agencies view on this more as background instead of debating point by point because I don't think that's what we are here to do is to debate point by point. I am trying to clarify or provide additional information. Yes.

Before I went on, there was another question on I don't know [unintelligible] if you had anything to add because there was another [interposing].

MR. RICE: The first question was about the industries which would be affected. In the federal register notice for the proposal there was a summary listing of which industries those would be. And in the proposal that was abbreviated to some extent but in the economic analysis there is more detailed information on which specific SIC codes make up those fifteen thousand facilities that we're estimating for the proposal and that economic analysis is available in its entirety on the web-site that I put up

earlier. It is also available in the public docket and if you have any comments about, well as I said, if you think there are other industries that would be affected that we haven't identified or if our estimate for a particular industry is incorrect for some reason and you have better data that you could provide and help us estimate that impact we would be really happy to have that information.

MALE VOICE: [unintelligible]. I think, I mean, you've got the analysis of what's at the various thresholds. If the EPA looks at a ten pound threshold versus a thousand pound threshold, what obviously in your analysis you must have come to some assumption to what percentage of the universe of lead releases would be covered by those various thresholds. Can you comment at all?

MR. KALINA: No.

MALE VOICE: What the additional benefit as far as information goes by dropping the threshold [unintelligible] present level to some significant lower threshold.

FEMALE VOICE: in at the different thresholds and look at information that was out there to estimate the facilities that would be required to report. There is not equivalent information to TRI data that is out there on releases to make that determination, number one.

And number two, in looking at the benefits of TRI it goes beyond the absolute quantity of the release. As I said there is the other waste management data and if one were to use as an example to use the data to do a screening level risk assessment, the hundred pound release to land may, is no more valuable than the ten pound release to water because you are trying to estimate what a particular population is exposed to. So a hundred pounds in itself is not better than ten pounds, so I, these numbers, I don't

think you can approach it that way.

MR. KALINA: So, I wanted to say in terms of the economic analysis, this rural [phonetic] proposal is an information collection proposal. The reason, part of the reason, that this is being proposed is that the EPA and the public don't have the information to characterize the releases of lead. Sort of in a catch-22 situation in terms of predicting what would be recorded when the rope is being proposed as a rule to collect that information.

MR.BOER: Let me ask that to Cody [unintelligible] where you see that. Part of that, part of the basis for a statute, one the reason that the statutes popular in Congress, was to collect information for [unintelligible] on a community level basis and so looking at the percent of a specific chemical that may be released nationwide doesn't necessarily address whether or not that can cause us concern in certain levels of communities.

So, if you say that a certain community is opposed to only 0.001 percent of the amount chemicals you release nationwide it doesn't necessarily translate to say that that is not of concern to that particular community. So, even very small releases that may not be significant on a nationwide analysis in terms of the overall percent totally that is released may be of discrete concern of different communities and different individuals that are located very near the facilities.

MS. GIRARD: That kind of rolls into my, Joan GIRARD, Electrotek Corporation. [Unintelligible] to offer your economic analysis [unintelligible]. According to 1996 data, 214 circuit board manufacturers and 131 assemblers reported in 1996.

Think this is finalized. Virtually all 730 circuit board manufactures and 1400

assemblers will be brought into this.

Again this brings me to the question of the question of reaching the point of diminishing return. He said, you know, I understand the EPA's point that no level of lead is, you know, any level of lead is considered toxic but at one point we try to trap this. It means for, we are not talking about Almost two thousand facilities in adding. my, in the electronic sector alone, just in manufacturers and assemblers of circuit boards alone. To bring them into this reporting program, for what benefit EPA's solely concerned about reporting and if everything is recycled, you don't really care where it goes you just want it reported where.

Report it then. But if it all goes to recycling, why make these two thousand facilities report when all the materials are going to recycle and the amount release is zero or the amount release is well within the permanent level for the POTW.

We are already regulated under [un-intelligible] regulated under are, you know, all they have is waste regulation. We are permitted but our local POTWs are permeated with our state agencies but why then add this additional burden to the facility.

And the other question that I have, you know, the gentleman brought up the point about lead-acid batteries. What about all those facilities that do some sort of testing or research and development that utilize our products, the circuit board. Which is considered an article component. But, recycled it is considered hazardous waste. Are they going to be exempt, you know, if they are, say we are doing prototype orders for facilities that do R&D. Solely R&D for development innovation of new technologies and new products. Are they brought into this then because they're using, buying a product

that has lead on it. And even if though it is considered an article component, at one point does this make sense? And at one point, you know, I think we have reached the point of diminishing returns and to impose something that is going to cause such an incredible burden on my industry sector alone, for what benefit if we are recycling it and if the results are we have to quantify all of this and the release to landfill is zero and the release of lead in our [unintelligible] has been, you know, non-detectable, so we have to go through this entire process of calculation to say, I want to recycle. You see the burden that this is imposing on [unintelligible].

For what purpose? So that we can inform the community that we are recycling lead. So, as far as data goes, you know, my industry sector alone and that's just the two, manufacturers and assemblers. You are talking about almost two thousand facilities alone. We'll be [unintelligible].

MR. RICE: Just to clarify in terms of the economic analysis for electronic components and accessories, we estimated that four thousand would be affected, so if it is actually less than that we could reduce the estimate.

MS. GIRARD: Yes, you probably have more facilities than [unintelligible].

MR. RICE: Yes, it's at 367 and if you can provide some data that would help us better characterize the effect on those industries.

MS. GIRARD : [unintelligible].

MR. RICE : Yes.

FEMALE VOICE : Yes, sir.

AUDIENCE: My name is Dr. James
Jordan. My comment is [unintelligible] reporting [unintelligible] something in micrograms call [unintelligible] the health of
children. And you are talking about a ten

pound release or admission. Multiply that by air emission.

God knows where it lands including soil, [unintelligible], and things that infect the child and the community and I like that aspect of recording because you can tell me this. A hundred percent of your lead is going to a landfill but if you are a mile away from a community and you are not going to a landfill, then all the responsibility goes back to the homeowner to make [unintelligible]. [Unintelligible] for the past five years and what I see is [unintelligible] work force or [unintelligible] the professional force for the next millennium.

We have impaired children from lead and that makes you, when it lands, no one knows where it lands. And from the amount of lead that is found on soil, you got PHs now. [Unintelligible] problems that are in soil now. The EPA is trying to regulate that and it is causing adverse health effects on children. And that's just the natural air release.

When it lands from the strong winds, you know, you do not know where it is going. My child, your child, comes down the chronic lead poisoning, it is not found in the home, you want to know where the source is because my job and your job as a parent is to treat the sick child. You want to back to the source. You always try with the home. The home is not always the source of the exposure. If ten pounds or a pound of lead burns somewhere, a microgram can make a child Imagine compounding that consistently with releases into an environment that a child is chronically exposed to, you have a retarded child which is a burden on child in terms of what it takes to educate and raise that child.

So, to keep an industry honest at least on paper saying that a hundred percent

of your lead is going to a landfill. Congratulations for circuit board people.

But everybody is not like that.

People lie. And they do what they do to save money. And I am here to tell you that these, the zinc, the mercury, the lead, these things impair the health of children and, again, the population most at risk for lead is children. From six months to six years. It's also great at showing its effect in children between six and twelve.

If you can't tell me where it is and I go and investigate your home, I can't help that family. If you have documentation that takes you out of my investigation, that's great. But I still have the responsibility to treat that child and find the exposure to the lead. Thank you.

MS. GIRARD: I just want to respond that lead is not airborne in a manufactured source unless it reaches a temperature of 750 degrees, so the majority of manufacture that they utilize under processes, we don't come close to those types of temperatures to make lead airborne.

AUDIENCE: You may not.

MS. GIRARD: In the majority of manufacture, you are going to see that in smelters or incinerators or whatnot, but manufacturing that utilize lead processing when you do lead soldering and such, you're not getting close to those temperatures.

AUDIENCE: You say that.

MS. GIRARD: Right. You know what, this shouldn't be, this should be comments and it's not a debate.

AUDIENCE: Okay, [unintelligible] a problem ten years ago. With it showing up in soil all over America now. It is coming from somewhere and there is no responsibility for it. But it is there now and it is impairing children. It is impairing you. So, the fact, you cannot even sell certain items be-

cause of what exists.

MR. BOER: Let me, if I could just to speak to the forum for a second, because I don't want to, first of all I want to make sure everyone has the chance to speak that wants to speak and second of all I want to make sure that we don't get carried into a complicated debate. So, I mean, I think the way that we would prefer to handle this is that anyone that wants to speak should have the opportunity to come to the podium and to say, say what they want to say and if you have a specific clarifying question that you need to understand what was said, please feel free to ask it.

If you have comments that are in doubt that you want to respond to, you want to hear those comments that's fine, but please wait to come up to the podium and to speak separately to address these kind of overlying, these larger issues, rather than entering into back and forth debate.

MR. YANKE: My name is Chuck Yanke. I am with Vulcan Lead. I feel a quite bit like Custer at his last stand right now. I am here to speak for Vulcan Lead and for Lead Industries Association.

Just a couple of comments to the gentleman who was just speaking. There is probably less than fifty manufacturers of lead components in the United States. provide a lot of components that are used by industry. In our applications, yes, we do melt lead. Most of the temperatures are seven hundred or less and we are already significantly regulated by EPA and OSHA, both for air admissions, for waste emissions. gitive emissions. And we are already extensibly, we are regulated in these areas and the compliance requirements there are certainly significant. We speak of the driving force and a lot of the comments has been lead in paint or lead poisoning in children.

The primary driving factor of the area has been pain which was, has not been applied in over thirty years. One of the areas is, you know, playground areas that are near highways. Again, from lead in gasoline that has also been discontinued. You also find that in most states you will find either regulations or laws that prohibit the use of lead in any articles that are used by chil-As you look across the industry, you will find most of the lead applications are now for industrial and use. You will find, as you know, we talk about bringing more companies into the reporting fold [phonetic] and you are talking manufacturing, companies such as ours produce a lot of components that go into industrial products.

You have the case of the companies that make band-saws. They may use a lead counterweight to counterbalance the saw blade. They receive a discrete component. They bolt it in place. When there product reaches the end of its economic life, it goes to a recycler to be recycled.

You have centrifugal governors used in trucks. Again, they reach, they are installed. There is no grinding. There is no melting. There is no dissemination of the product.

You have something as benign as aviation. You will find most aircraft, as hard as it is to believe, general aviation aircraft use lead weights to balance the ailerons and the flaps.

You are going to be bringing all of these manufacturers into this reporting requirement and so far I haven't heard any evidence to warrant what the reduction or reporting department is going to give us going from ten to five pounds in this area.

Also, lead is one of the most highly recycled products. It is recycled at a rate even higher than aluminum and most people

think aluminum is recycled at an incredibly high rate.

The final item as far as, we are talking about the amount of quantities we are trying to track this diminishing return concept as we are talking about a company tracking a piece of material that is one inches by five inches by five inches. That's how much ten pounds of lead is.

You are going to follow that piece through a manufacturing process for the entire year. You are telling this guy, this piece, that is as big as a book, you've got to go now and spend thousands of dollars tracking it and filling forms out. I would tend to agree with the young lady that talked about the point of diminishing returns. We are talking about less than 25 cubic inches of product you are wanting to track and I think you have reached the point of diminishing returns. I appreciate your opportunity to talk and I'll try and dodge the arrows as I leave.

MS. DOA: Are there any clarifying questions? Would anyone else like to comment?

AUDIENCE: I just want to make one point.

MS. DOA: Sure.

AUDIENCE: That the doctor made and I am sure having his expertise he is right. I think we are getting confused with data versus actual symptoms from a disease or a poison. What I have been hearing today is that with small amounts being traced through companies and very small amounts being released and if it less than one you round off and whatever and a lot of companies are going to be missed. I think it is a disservice for the reporting information to the public because it is not the right information and if it is not the right information you are going to get maybe an excessive amount of informa-

tion that may lead you to other diagnosis and that's not the real cause. I think it is confusing.

It is a disservice to the public because I think it creates fear. If the information is incorrect, than it is an unnecessary fear. So, you said that the regulations stated that the TRI report are just reports alone, I think that is where the problem comes in. It should be based on scientific or more accurate engineering data so that we cold get the right information to the public. You can tell the public anything you want them to here and I think this is what is hap-I think to try to report ideas is excellent but it has to be done on a more scientific base and give them enough time to put industry to higher the people that can do this.

Small businesses can't afford it.

Conglomerately, you are saying that the impact to, of this regulation is quite small and than everybody is trying to agree but there is one fact that even President Clinton has said for many years and presidents before him is the small businesses conglomerate that is the backbone of the industry in this country. I think this has to be realized. I really think it has been underestimated. Thank you.

MS. DOA: Anyone else? Yes.

MR. MCKINNON: Again this is Mike McKinnon with Rogers Brothers Galvanizing and just clearly building off what the last speaker indicated is certainly, you know, all of us are concerned with the potential of lead, however, diminishing returns. By the EPA's own estimates, the first year of reporting with the number of companies they are indicated, if you take the total number of reports and the estimated industry costs, it comes down to about seven thousand six hundred and ninety two dollars for the first

year for reporting.

If you look at a multimillion dollar company, this is peanuts. It is one-one hundredth of a percent. You take a small manufacturer who may have five hundred thousand dollars in revenues and now you are talking about one and a half percent of their sales. Not their income, but their sales. So, if the information at that small quantities is not relevant and you are putting that huge economic burden on small business of America, are we really gaining anything?

MS. DOA: Thank you. Anyone else? If not, I think what we are going to do is break for lunch until 1:30 and we will be back here at three o'clock because the meeting is to go for three o'clock, but if you plan at leaving at lunch, I just want to thank everyone for taking the time to come and talk to us and provide us with comment on this rule making.

FEMALE VOICE : [unintelligible].

[End Tape #2--Side A]

[Start Tape #3--Side A]

MS. DOA: ... but we were waiting on someone from, someone who wanted to talk—he wanted to talk right after lunch and he is not here.

And again I'll ask if anyone else would like to provide comments? Please feel free to do so. We would love to hear them. But ...

Someone told us right before lunch they wanted to speak, after lunch.

MALE VOICE : Do we have anything else planned?

 $\ensuremath{\mathsf{MS.}}$ DOA : Why should I say that, you know I mean.

MALE VOICE : [Inaudible]

 $$\operatorname{MS.}$ DOA : Right. There'll be no other presentations.

MR. BOER : From us.

MS. DOA: From us. Sorry! [Laugh-

terl

MALE VOICE: Can I make a motion to adjourn then?

MS. DOA: Well it's up to you. We'll be here 'til three because we said we would be here 'til three, but.

MALE VOICE : Well if there's no
[inaudible]

 $\ensuremath{\mathsf{MS.}}$ DOA : Oh, please. Yes. If you wish.

MALE VOICE: I thank you for your very nice presentation. [Inaudible]

MS. DOA: Thank everyone for their comments. We much appreciated them and much appreciated that you took the time to come and speak with us.

 $\mbox{\sc MALE VOICE}$: [Music] You have five minutes remaining.

FEMALE VOICE: Is there any way that the EPA might consider raising the level to say a three pounds or so? I am not really representing my association right now. I don't know enough about it. [Inaudible] investigate, but we are a small, small [inaudible] group and I just wondered if, for instance they, if it is possible that they would consider just raising it a little? This could cause a major problem on the hobby people.

MS. DOA: You should send in a comment on that. Certainly I think we, we certainly asked for comment on those issues, but the hobby groups. What industry sector, because this doesn't cover everybody.

FEMALE VOICE: No this happens to be regular [unintelligible] trade association. And so are, our members are people who make those little radios and things like that. Those folks that fly airplanes.

 ${\tt MS.\ DOA}$: But they wouldn't be covered.

FEMALE VOICE : [inaudible]
MALE VOICE : If they are individual

hobbyists.

MS. DOA: If they are hobbyists, if they are the people [interposing]

FEMALE VOICE : No, no, no, no.

They have [interposing]

MULTIPLE VOICES : [unintelligible] MS. DOA : They are the manufacturers.

FEMALE VOICE : [inaudible] They are a hobby and we [inaudible]

MS. DOA: And they are in the manufacturing sector?

FEMALE VOICE: They are [inaudible] manufacturing. But they are small.

MS. DOA: Yes.

 $$\operatorname{MS.}$ DOA : Because they have more than ten employees?

FEMALE VOICE : Right.

 $\,$ MS. DOA : Okay. Well I would strongly encourage you to submit comments to that effect.

FEMALE VOICE : [inaudible]

MALE VOICE: I think this may be the first of one where it does not lead to-wards the reduction in using because I don't think if you drop it to ten, there'll be no incentive to anybody really changing because they can't get below ten anyway.

MS. DOA: Right.

 $\ensuremath{\mathsf{MALE}}$ VOICE : Maybe you should talk about your study.

MALE VOICE: So that in this particular material there is very few things that you could have used that don't hurt it.

MS. DOA : Yes.

 $\,$ MALE VOICE : But they add taxanes for example. We were able to switch to heptane.

MS. DOA: Okay.

MALE VOICE: But, well that you can't change. You can't have below ten. So

there'll probably be, you know, everything will be essentially the same.

MS. DOA : Yes, yes.

MALE VOICE: Probably you'll find all the people that report at least maybe 90% of them, all the emissions the O2 recycling.

MS. DOA: Yes, yes. Yes, yes.

MALE VOICE: And it'll be none to release to the environment as such.

MS. DOA : Yes.

MALE VOICE: And that won't tell you any new information either. So. This one, this one is a little more difficult than most of the ones we've seen.

MS. DOA : Yes, yes.

MALE VOICE: Because as I say, it doesn't lead to reduction in use. Glycol ethers, ethylene glycol, although some of the ones that we use a lot of, there have been pressures to use less of.

MS. DOA: Right.

MALE VOICE : But ... No way we'll get below ten pounds.

MS. DOA: Right, right. Okay. So it's a substitute issue.

MALE VOICE : So it gets.

MALE VOICE : [Music] One minute remaining.

MS. DOA: Well, thank you.

MALE VOICE: Thank you.

FEMALE VOICE : [Your conference

time has now expired. Thank you.]

[End of recording.]